

New York State Department of Environmental Conservation

MEMORANDUM

TO: Mr. P. Foersch *PSF*
 FROM: Mr. M. Doster *Martin Doster*
 SUBJECT: Great Lakes Carbon (GLC)
 Niagara Falls (C), Niagara County
 DATE: SPDES Permit No. NY0000906

September 27, 1984

Reconnaissance Inspection: 9/25/84 (Tues.)
 Weather: cldy, windy-70°; Previous day: cldy.
 Attendees: M. Doster(DEC), R. Gwozdek(NCHD),
 M. Reeley-~~pe~~ Engineer(GLC)

The purpose of the reconnaissance inspection was to review the facility with respect to SPDES Permit No. NY0000906. The writer met with Mr. Mike Reeley who conducted a tour of the facility and the outfalls. The following items were discussed during the course of the inspection:

Overview

GLC manufactures carbon products such as electrodes from petroleum cokes and coal tar pitches. The manufacturing process includes a graphitizing step which converts hard carbon electrodes into graphite in electrical resistance furnaces. These furnaces have exposed busses which are cooled by direct contact with municipal water. GLC also cools their transformers with the municipal water supply. The cooling water is directed to two outfalls, 002 and 004, which discharge to a small creek named Pike's Creek. These outfalls also service the stormwater catch basins around the plant site.

*60TH ST
STORM SEWER*

Past Operations

At one time, the facility maintained two additional outfalls, 001 and 003, which drained strictly stormwater from the plant site. These outfalls were, therefore, deleted from the SPDES permit.

GLC also operates a sawing process which utilizes water as a cutting fluid. This water used to be directed to outfall 001, but a recycle-closed loop system was installed over 5 years ago. The recycle system uses a "lamella" type separator which concentrates the solids into a sludge which is disposed of by Modern Disposal.

Inspection of Pike's Creek

Cooling water from the east end of the plant is directed to a liftstation which pumps to outfall 004. A magnetic type flowmeter/totalizer records the flow during each pumping cycle. It was noted

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that the meter was out of service for calibration.

A bubbler-type flow meter is installed at outfall 002 which monitors the cooling water/stormwater flow into Pike's Creek. A physical inspection of the two outfalls indicated cooling water was being discharged at normal rates. The creek was a hazy-white color with a slight oil sheen. An absorbant boom was positioned at the point where the creek goes into the conduits.

Drainage points, formerly referred to as outfalls 001 and 003, were inspected and found to be discharging. Mr. Reece explained that although it had not rained for the previous few days, the flow was thought to be coming from an elevated groundwater table which was infiltrating into the stormwater conduits.

Autoclave Operation

GLC operates an impregnation process which treats graphitized electrodes with a liquid pitch (tar-like liquid) under elevated pressure and temperature. Stack gases from this operation are bubbled through a small tank containing water which strips the gases of all pitch fume emissions. According to Mr. Reece, should this water overflow, it would be directed to a sump which ultimately is pumped to outfall 002. Another source of wastewater is actual quench water which contacts the treated electrode and is recycled back to a storage tank. Again, this tank would only discharge to the sump if an overflow occurred. The sump has a baffle and an absorbant pillow which acts as a crude oil/water separator.

It was explained to Mr. Reece that this process must be listed on the SPDES application and that NCHD would address this matter by letter in the near future. ✓

Boiler Blowdown Chemicals

An inspection of the new automatic blowdown system was done. This system was the assumed cause of a SPDES permit excursion that was reported on 8/17/84. GLC is still using boiler chemical #237 but hopes to switch to Nalco 2802 to prevent further SPDES violations.

The possibility of discharging the blowdown to the sanitary sewer was discussed. The total volume of blowdown discharged daily is not determined, but it is presumed to be less than 1,000 gpd. Mr. Reece stated that the blowdown could be piped to the sanitary sewer, but the City will not allow the tie-in. — HAVE GPS DISCUSS

WITH SKY SMITH OR JIM WESTENDORF.

SPCC Raw Material Inventory

An inspection of the outdoor storage tanks was done to evaluate proper spill prevention and control. It was noted that the majority of the tanks stored liquid coal pitch (similar to No. 6 fuel oil). Therefore, secondary containment is minimal due to the high viscosity of the materials involved.

Also inspected were raw material storage piles which consisted mainly of solid coal tar pitch. Generally, the storage areas were inside buildings which protected against any storm induced runoff.

MLD:ts

cc: NCHD-Mr. R. Gwozdek